ELSEVIER

Bioelectrochemistry and Bioenergetics 45 (1998) 305

BIOELECTROCHEMISTRY AND BIOENERGETICS

Author Index of Volume 45

Asami, K. 139

Bara, M. 131
Bekhiet, G.E. 275
Berg, H. 261
Binhi, V.N. 73
Blad, B. 169
Blank, M. 253

Cai, G. 127
Cai, X. 33
Cammack, R. 293
Campbell-Beachler, M. 103
Chamberlain, S.C. 111
Chen, G. 127
Chen, X. 287
Chicharro, M. 33
Ci, Y.-X. 247
Correia dos Santos, M.M. 267
Cui, X. 173

Deng, J. 287
Diao, P. 173
Ding, H. 123
Drungiliene, A. 227

Eckert, R. 55
El-Maali, N.A. 281

Fang, Y. 287
Feng, J. 247
Fernandes, J. 33
Ferri, T. 221
Fleminger, G. 27

Galla, H.-J. 17
Gao, R. 41, 123
Gao, X. 41
Gebhard, M.M. 151
Gersing, E. 145, 151
Gheorghiu, E. 139
Goossens, J. 17
Goyal, R.N. 47
Grant, D.H. 33
Gu, D. 173
Guiet-Bara, A. 131

Haggren, W. 103
Hianik, T. 233
Hong, F.T. 193
Hülser, D.F. 55

Ibrahim, B. 131
Irmer, U. 55

Ishida-Jones, T. 103
Ivanov, S.A. 233
Ivaschuk, O. 103
Ivnitski, D. 27

Janas, T. 215, 215
Janshoff, A. 17
Jelínek, F. 239
Jiang, D. 173
Jones, R.A. 103
Jossinet, J. 161

Kelly, D.P. 293
Kirlum, H.-J. 151
Kotnik, T. 3
Krišciukaitis, A. 55
Kulys, J. 227
Kumar, N. 47

Lavandier, B. 161
Lei, C. 261
Leveteau, J. 131
Liu, F. 123
Lopes, C. 293

Matsuoka, H. 83
Mazat, J.-P. 181
Miklavčič, D. 3
Miller, I.R. 203
Mindermann, A. 55
Modesto, A.M.M. 267
Mota, A.M. 293

Nemoto, Y. 83

Oh, K.-B. 83
Ollmar, S. 157
Ouhabi, R. 181
Ozsoz, M. 33

Paleček, E. 33
Passechnik, V.I. 233
Petrak, M.R. 193
Phillips, J.L. 103
Pleiss, J. 55
Pokorný, J. 239
Poscia, A. 221

Radi, A. 275
Rehák, M. 233
Rehkopf, B. 55

Reihs, K. 17
Rigoulet, M. 181
Rishpon, J. 27
Rivas, G. 33
Ruan, C. 287

Saito, M. 83
Santucci, R. 221
Schäfer, M. 151
Scheller, F. 227
Schlegel, C. 151
Schuster, S. 181
Sharovskaya, J. 55
Shergill, J.K. 293
Shiraishi, H. 33
Simões Gonçalves, M.L. 267, 293
Singhal, N.K. 47
Sivak, B. 233
Slivnik, T. 3
Šnejdárková, M. 233
Solomon, B. 27
Soo, L. 253
Sotoyama, H. 83
Sousa, P.M.P. 267
Steinem, C. 17
Süssmuth, R. 93

Takayama, K. 67
Tong, R. 173
Traub, O. 55
Trkal, V. 239
Tu, P. 127

Vogel, R. 93
Von dem Bruch, K. 17

Wachtel, E. 203
Walińska, K. 215
Wang, J. 33
Wolf, T. 27
Wollenberger, U. 227

Yuan, Z. 41, 123

Zhang, C.-Y. 247
Zhang, R. 127
Zhao, N. 127
Zhao, Z. 41
Zhong, B. 173

ELSEVIER

Bioelectrochemistry and Bioenergetics 45 (1998) 307–311

BIOELECTROCHEMISTRY AND BIOENERGETICS

Subject Index of Volume 45

AFM
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Anodic stripping voltammetry
Voltammetric behaviour of copper complexes with cytosine and its nucleoside (Correia dos Santos et al.) 267
Antibody
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Antimycin
Biocatalyst electrode modified with whole-cells of *P. denitrificans* for the determination of nitrate (Takayama) 67
ATR-FTIR
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Azactam
Electrochemical behaviour of the monobactam antibiotic aztreonam at different electrodes and in biological fluids (El-Maali) 281

Bacterial growth
Interaction of bacterial cells with weak light emission from culture media (Vogel, Süssmuth) 93
Bacteriorhodopsin
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
Bilayer lipid membrane
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Current fluctuations of bilayer lipid membranes modified by glucose oxidase (Passechnik et al.) 233
Bioelectric phenomena
Electric field around microtubules (Pokorný et al.) 239
Bioelectrocatalysis
Biocatalyst electrode modified with whole-cells of *P. denitrificans* for the determination of nitrate (Takayama) 67
Biorecognition
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Biosensor
Valinomycin-mediated transport of alkali cations through solid supported membranes (Steinem et al.) 17
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Direct electrochemistry of membrane-entrapped horseradish peroxidase. Part II: Amperometric detection of hydrogen peroxide (Ferri et al.) 221
Breast cancer
The discrimination of excised cancerous breast tissue samples using impedance spectroscopy (Jossinet, Lavandier) 161

Ca^{2+}-induced ion channel
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Calcium
Interference mechanism for some biological effects of pulsed magnetic fields (Binhi) 73
Calmodulin
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Cancerous tissues
Impedance spectra of cancerous and normal tissues from a mouse (Blad) 169
Carbon electrodes
Voltammetry of melatonin at carbon electrodes and determination in capsules (Radi, Bekhiet) 275
Carbon paste electrode
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33
Membrane covered carbon paste electrode for the electrochemical determination of peroxidase and microperoxidase in a flow system (Kulys et al.) 227
Cell cycle
Monitoring cell cycle by impedance spectroscopy: experimental and theoretical aspects (Gheorghiu, Asami) 139
Cell membrane
Interaction of bacterial cells with weak light emission from culture media (Vogel, Süssmuth) 93
Cell membranes
In vivo measurement of the electrical impedance of cell membranes of tobacco cultured cells with a multifunctional microelectrode system (Sotoyama et al.) 83
Cell suspension
Monitoring cell cycle by impedance spectroscopy: experimental and theoretical aspects (Gheorghiu, Asami) 139
Cellular telephones
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
Channels
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131
Chemically modified electrode
Direct electrochemistry of membrane-entrapped horseradish peroxidase. Part II: Amperometric detection of hydrogen peroxide (Ferri et al.) 221
Chemiluminescence
Interaction of bacterial cells with weak light emission from culture media (Vogel, Süssmuth) 93

Cholesterol
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Circadian rhythm
Circadian rhythms in the horseshoe crab lateral eye: signal transduction and photostasis (Chamberlain) 111
Cl^- ions
Electroporation of polyprenol-phosphatidylcholine bilayer lipid membranes (Janas et al.) 215
Comet assay
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
Complexation
Voltammetric behaviour of copper complexes with cytosine and its nucleoside (Correia dos Santos et al.) 267
Condensation of energy
Electric field around microtubules (Pokorný et al.) 239
Connexin
Intercellular communication via gap junction channels (Hülser et al.) 55
Constant current chronopotentiometry
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33
Copper(II)/copper(I)
Voltammetric behaviour of copper complexes with cytosine and its nucleoside (Correia dos Santos et al.) 267
Correlated electrostatic attraction
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Corynebacterium glutamicum
Electromagnetic window effects on proliferation rate of *Corynebacterium glutamicum* (Lei, Berg) 261
Current fluctuations
Current fluctuations of bilayer lipid membranes modified by glucose oxidase (Passechnik et al.) 233
Cyclic voltammetry
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Direct electrochemistry of membrane-entrapped horseradish peroxidase. Part II: Amperometric detection of hydrogen peroxide (Ferri et al.) 221
Cytidine
Voltammetric behaviour of copper complexes with cytosine and its nucleoside (Correia dos Santos et al.) 267
Cytochrome $c_{552.5}$
Electrochemistry of *Paracoccus versutus* cytochrome $c_{552.5}$ adsorbed on a glassy carbon electrode (Mota et al.) 293
Cytochrome oxidase
Enhancement of cytochrome oxidase activity in 60 Hz magnetic fields (Blank, Soo) 253
Cytosine
Voltammetric behaviour of copper complexes with cytosine and its nucleoside (Correia dos Santos et al.) 267

Data classification
The discrimination of excised cancerous breast tissue samples using impedance spectroscopy (Jossinet, Lavandier) 161
Daunomycin–DNA interactions
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33
Daunomycin intercalation in DNA at surfaces
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33
Dehydration
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Deoxyribose
Use of deoxyribose as a probe for the determination of rate constants for reactions of hydroxyl radicals on mercury electrodes (Gao et al.) 123
Determination in biological fluids
Electrochemical behaviour of the monobactam antibiotic aztreonam at different electrodes and in biological fluids (El-Maali) 281
Deuterium–hydrogen exchange
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Dielectric spectroscopy
Monitoring cell cycle by impedance spectroscopy: experimental and theoretical aspects (Gheorghiu, Asami) 139
DNA damage
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
DNA-modified electrode
Interactions of antitumor drug daunomycin with DNA in solution and at the surface (Wang et al.) 33

Effect of Ca^{2+} chelators +
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
Effect of chloride ion channel blockers
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
Electrical impedance
Monitoring of damage to skeletal muscle tissues caused by ischemia (Schäfer et al.) 151
Methods of information extraction from impedance spectra of biological tissue, in particular skin and oral mucosa—a critical review and suggestions for the future (Ollmar) 157
Electric field
Effects of the weak alternating electric field on Na^+ concentration inside human red blood cells (Chen et al.) 127
Electric field of microtubules
Electric field around microtubules (Pokorný et al.) 239
Electric field stimulation
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3
Electrochemical model
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Electrochemical reduction
Electrochemical reduction of bonded oxygen in oxyhemoglobin at gold electrodes modified by self-assembled cysteamine monolayers (Ruan et al.) 287
Electrochemistry
Electrochemistry of *Paracoccus versutus* cytochrome $c_{552.5}$ adsorbed on a glassy carbon electrode (Mota et al.) 293
Electrode mechanism
Electrochemical behaviour of the monobactam antibiotic aztreonam at different electrodes and in biological fluids (El-Maali) 281
Electromagnetic fields
Enhancement of cytochrome oxidase activity in 60 Hz magnetic fields (Blank, Soo) 253

Electron transfer mediator
Biocatalyst electrode modified with whole-cells of *P. denitrificans* for the determination of nitrate (Takayama) 67
Electrooxidation
Oxidation chemistry and biochemistry of indole and effect of its oxidation product in albino mice (Goyal et al.) 47
Electroporation
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3
Electroporation of polyprenol-phosphatidylcholine bilayer lipid membranes (Janas et al.) 215
ELF PMF
Interference mechanism for some biological effects of pulsed magnetic fields (Binhi) 73
Enzyme-channeling amperometric immunosensor
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Enzyme kinetics
Enhancement of cytochrome oxidase activity in 60 Hz magnetic fields (Blank, Soo) 253
Escherichia coli
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Excised tissue
The discrimination of excised cancerous breast tissue samples using impedance spectroscopy (Jossinet, Lavandier) 161
Extracellular potassium
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131

Gap junction channel
Intercellular communication via gap junction channels (Hülser et al.) 55
Gap junctions
Impedance spectroscopy on living tissue for determination of the state of organs (Gersing) 145
Glucose oxidase
Current fluctuations of bilayer lipid membranes modified by glucose oxidase (Passechnik et al.) 233

Halide and divalent cation effects
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
pH difference
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Helmholtz coils
Electromagnetic window effects on proliferation rate of *Corynebacterium glutamicum* (Lei, Berg) 261
Horseradish peroxidase
Direct electrochemistry of membrane-entrapped horseradish peroxidase. Part II: Amperometric detection of hydrogen peroxide (Ferri et al.) 221
Membrane covered carbon paste electrode for the electrochemical determination of peroxidase and microperoxidase in a flow system (Kulys et al.) 227
Horseshoe crab
Circadian rhythms in the horseshoe crab lateral eye: signal transduction and photostasis (Chamberlain) 111

Human placenta
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131
Human red blood cells
Effects of the weak alternating electric field on Na^+ concentration inside human red blood cells (Chen et al.) 127
Hydrolysis of GTP
Electric field around microtubules (Pokorný et al.) 239
Hydroxyl radicals
Use of deoxyribose as a probe for the determination of rate constants for reactions of hydroxyl radicals on mercury electrodes (Gao et al.) 123
60 Hz magnetic fields
Enhancement of cytochrome oxidase activity in 60 Hz magnetic fields (Blank, Soo) 253

Immunogold labelling
Intercellular communication via gap junction channels (Hülser et al.) 55
Impedance
In vivo measurement of the electrical impedance of cell membranes of tobacco cultured cells with a multifunctional microelectrode system (Sotoyama et al.) 83
Impedance spectra
Impedance spectra of cancerous and normal tissues from a mouse (Blad) 169
Impedance spectroscopy
Valinomycin-mediated transport of alkali cations through solid supported membranes (Steinem et al.) 17
The discrimination of excised cancerous breast tissue samples using impedance spectroscopy (Jossinet, Lavandier) 161
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Indole
Oxidation chemistry and biochemistry of indole and effect of its oxidation product in albino mice (Goyal et al.) 47
Interbilayer hydrogen bonding
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Interference
Interference mechanism for some biological effects of pulsed magnetic fields (Binhi) 73
Ion binding
Interference mechanism for some biological effects of pulsed magnetic fields (Binhi) 73
Ion transport
Valinomycin-mediated transport of alkali cations through solid supported membranes (Steinem et al.) 17
Ischemia
Impedance spectroscopy on living tissue for determination of the state of organs (Gersing) 145
Monitoring of damage to skeletal muscle tissues caused by ischemia (Schäfer et al.) 151
ITO
Photoelectric behavior of mammalian cells and its bioanalytical applications (Ci et al.) 247

Kinetic constant
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27

Lateral eye
Circadian rhythms in the horseshoe crab lateral eye: signal transduction and photostasis (Chamberlain) 111

Lecithin
Cyclic voltammetry and a.c. impedance studies of Ca^{2+}-induced ion channels on Pt-BLM (Diao et al.) 173
Low angle X-ray
Interbilayer interaction and deuterium–proton exchange in thin films of phosphatidyl serine (Miller, Wachtel) 203
Low-conductivity medium
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3

Mammalian cells
Photoelectric behavior of mammalian cells and its bioanalytical applications (Ci et al.) 247
Mediator
Membrane covered carbon paste electrode for the electrochemical determination of peroxidase and microperoxidase in a flow system (Kulys et al.) 227
Melatonin
Voltammetry of melatonin at carbon electrodes and determination in capsules (Radi, Bekhiet) 275
Membrane potential
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131
Membranes
Monitoring of damage to skeletal muscle tissues caused by ischemia (Schäfer et al.) 151
Mercury electrodes
Use of deoxyribose as a probe for the determination of rate constants for reactions of hydroxyl radicals on mercury electrodes (Gao et al.) 123
Microperoxidase-11
Membrane covered carbon paste electrode for the electrochemical determination of peroxidase and microperoxidase in a flow system (Kulys et al.) 227
Mitochondria
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Modelling
Methods of information extraction from impedance spectra of biological tissue, in particular skin and oral mucosa—a critical review and suggestions for the future (Ollmar) 157
Modified electrode
Electrochemical behaviour of the monobactam antibiotic aztreonam at different electrodes and in biological fluids (El-Maali) 281
Molecular biophysics
Electric field around microtubules (Pokorný et al.) 239
Mouse
Impedance spectra of cancerous and normal tissues from a mouse (Blad) 169
Multifunctional microelectrode system
In vivo measurement of the electrical impedance of cell membranes of tobacco cultured cells with a multifunctional microelectrode system (Sotoyama et al.) 83

Na^+ concentration
Effects of the weak alternating electric field on Na^+ concentration inside human red blood cells (Chen et al.) 127
Nitrate determination
Biocatalyst electrode modified with whole-cells of *P. denitrificans* for the determination of nitrate (Takayama) 67
1-(*N*,*N*-dimethylamine)-4-(4-morpholine) benzene
Membrane covered carbon paste electrode for the electrochemical determination of peroxidase and microperoxidase in a flow system (Kulys et al.) 227

Open probability
Intercellular communication via gap junction channels (Hülser et al.) 55
Oral mucosa
Methods of information extraction from impedance spectra of biological tissue, in particular skin and oral mucosa—a critical review and suggestions for the future (Ollmar) 157
Oxidative stress
Interaction of bacterial cells with weak light emission from culture media (Vogel, Süssmuth) 93
Oxyhemoglobin
Electrochemical reduction of bonded oxygen in oxyhemoglobin at gold electrodes modified by self-assembled cysteamine monolayers (Ruan et al.) 287

Paracoccus denitrificans
Biocatalyst electrode modified with whole-cells of *P. denitrificans* for the determination of nitrate (Takayama) 67
Paracoccus versutus
Electrochemistry of *Paracoccus versutus* cytochrome $c_{552.5}$ adsorbed on a glassy carbon electrode (Mota et al.) 293
Pattern recognition
Methods of information extraction from impedance spectra of biological tissue, in particular skin and oral mucosa—a critical review and suggestions for the future (Ollmar) 157
Photoelectric behavior
Photoelectric behavior of mammalian cells and its bioanalytical applications (Ci et al.) 247
Photoelectric effect
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
Polyprenol-phosphatidylcholine bilayer lipid membranes
Electroporation of polyprenol-phosphatidylcholine bilayer lipid membranes (Janas et al.) 215
Proliferation
Electromagnetic window effects on proliferation rate of *Corynebacterium glutamicum* (Lei, Berg) 261
Protein entrapment
Direct electrochemistry of membrane-entrapped horseradish peroxidase. Part II: Amperometric detection of hydrogen peroxide (Ferri et al.) 221
Proton transport
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Pulse duration
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3
Pulse shape
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3
Purple membranes
Component analysis of the fast photoelectric signal from model bacteriorhodopsin membranes. V. Effects of chloride ion transport blockers and divalent cation chelators (Petrak, Hong) 193
Pyrogallol autoxidation
Mechanism of pyrogallol autoxidation and determination of superoxide dismutase enzyme activity (Gao et al.) 41

Quantum dynamics
Interference mechanism for some biological effects of pulsed magnetic fields (Binhi) 73

Radiofrequency radiation
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
Rate constants
Use of deoxyribose as a probe for the determination of rate constants for reactions of hydroxyl radicals on mercury electrodes (Gao et al.) 123
Redox reaction kinetics
Enhancement of cytochrome oxidase activity in 60 Hz magnetic fields (Blank, Soo) 253

Self-assembled monolayers
Electrochemical reduction of bonded oxygen in oxyhemoglobin at gold electrodes modified by self-assembled cysteamine monolayers (Ruan et al.) 287
Single cell gel electrophoresis
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
Single strand breaks
DNA damage in Molt-4 T-lymphoblastoid cells exposed to cellular telephone radiofrequency fields in vitro (Phillips et al.) 103
Single-sweep oscillopolarography
Mechanism of pyrogallol autoxidation and determination of superoxide dismutase enzyme activity (Gao et al.) 41
Site-mapping
An amperometric biosensor for real-time analysis of molecular recognition (Ivnitski et al.) 27
Skeletal muscle
Monitoring of damage to skeletal muscle tissues caused by ischemia (Schäfer et al.) 151
Skin
Methods of information extraction from impedance spectra of biological tissue, in particular skin and oral mucosa—a critical review and suggestions for the future (Ollmar) 157
Smooth muscle cells
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131
SOD activity
Mechanism of pyrogallol autoxidation and determination of superoxide dismutase enzyme activity (Gao et al.) 41
Solid supported lipid bilayers
Valinomycin-mediated transport of alkali cations through solid supported membranes (Steinem et al.) 17

Tissue impedance
Impedance spectroscopy on living tissue for determination of the state of organs (Gersing) 145
Toxicity
Oxidation chemistry and biochemistry of indole and effect of its oxidation product in albino mice (Goyal et al.) 47
Transmembrane potential
Modelling the interrelation between the transmembrane potential and pH difference across membranes with electrogenic proton transport upon build-up of the proton-motive force (Schuster et al.) 181
Transmembrane voltage
Time course of transmembrane voltage induced by time-varying electric fields—a method for theoretical analysis and its application (Kotnik et al.) 3

Ultraweak photon emission
Interaction of bacterial cells with weak light emission from culture media (Vogel, Süssmuth) 93

Valinomycin
Valinomycin-mediated transport of alkali cations through solid supported membranes (Steinem et al.) 17
Vessels
Involvement of external potassium in membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 131
Viability
Impedance spectroscopy on living tissue for determination of the state of organs (Gersing) 145
Vibration states in microtubules
Electric field around microtubules (Pokorný et al.) 239
Voltammetry
Voltammetry of melatonin at carbon electrodes and determination in capsules (Radi, Bekhiet) 275

Yeast
Monitoring cell cycle by impedance spectroscopy: experimental and theoretical aspects (Gheorghiu, Asami) 139